THE ARCTIC MYSTERY

What the Ancients Knew of the Frozen North.

THE HALDES OF THE GODS.

Cimmerian Darkness-Days Without Sunset-The Voyage of the Argonauts.

From the earliest days of the Aryan race the ch of enterprise has been most largely and filly to the West and the North. The westward line of activity and discovery has now become a circle, belting the earth. All mundane questions are suswered or in hand for solution along the three for the greatest of all physical endeavor ste our knowledge of the world we live on. The polar regions are now, as for ages past, the field of unfinished research and adventure. Will the indomitable energy and effort of our age conquer the terrible difficulties and break through the obstacles barring a complete knowledge of the Worth lands and the Antarctic regions of the world? A glance at some of the ancient voyages and later overies toward the North Pole, such as may not be generally well known, will doubtless be of intersea does not begin where we. standing on the shore, seem first to behold a ship's faint nd partial appearance at the distant horizon. The sway sails and then the blur of the rising hull are to the eye as the myths and traditions of the world's ANCIENT IDEAS OF THE ARCTIC.

There is a period with undefined beginning. crowned by the Homeric age, when the people about the sasterly parts of the Mediterranean Sea possessed le knowledge of the northern seas and lands of Europe. That age is semi-historic and is immediately succeeded by one affording clearer statements. We have, from the days of Homer, recorded expressions of geographical knowledge. Some recorded by the poet relate especially to the northerly parts of the world. Fragments of the early accounts are clearly authentic. These and later statements Scriptures (Isaiah xiv.) the idea is expressed that beaven, or the mount of the Lord, is situated in the North. The Greeks believed the infernal regions were located in the remotest North. Men have thought they found both there—heaven in the sublime scenery and the glory and beauty of the Arctic summer, and the very gates of the pit in the darkes and storm and bitterness of the polar winter. The Phœnicians, who founded Tyre and Sidon on the eastern shore of the Mediterranean, were the boldest known navigators of ancient times. They were the founders of Carthage, where many remarkable mari-time enterprises were projected. Cadiz, in Spain, was the seat of one of their colonies about a thou-sand years before the Christian era. At that time ns had attained vast opulence by their sommercial enterprise. They overran much of the world by land and sea for trade (and in piracy), as plundering of cities. Phoenicians were the pilots of all Egyptian ships and taugut the Greeks the art of were semi-pirates may be inferred from Homer's sclaration of their "doing all manner of iniquity to en." These explorers were probably the first disers of Great Britain. Their policy was gen-one of secrecy as to the locality of the most table islands and countries. Homer, both poet d geographer, gives some very marked points of of the condition of the Arctic nds. This knowledge was probably derived in great river, and it is not unlikely, from a report of the great currents that sweep through parts then known to the Phonicians and, it may be, the Greeks. Honer's relation of the ends of the Arctic Ocean, where rians lived in gloom, where the sun was not seen to set or rise (the sun during Arctic summer appears to sweep around above the horizon), indicates the possession of a knowledge of the long nights of very high latitudes. The planetee ering rocks of the sea that he mention were simply icebergs. That Homer should rate the polar as the infernal regions must seem excusable to Homeric voyages should remember the length of the Arctic day. The old bard understood something of the geographical truths told in his story of Ulysses. though the facts were clothed in such poetic garments as to be unrecognizable by most people in

The ancient tale of the Argonauts, of a possibly later date than the age of Homer, and bearing the name of Orpheus, affords some striking eviden the possession by the writer of a considerable knowl doubt the reality of the Argonautic expedition. Many of the statements made in the relation are geoprophetal facts. These were not purely accidental hits of imagination—they are too peculiar to be truths reached by guessing. The Argonauts (who probably used boats of hides and carried their light d portable craft across interrupting land spaces) exisnding to the Cronian Ocean. They passed forth by rowing nine days and nights to the Cronian along beyond the Riphean Mountains. (These were probably the great range between Norway and Sweden.) They visited the Macrobians, a people noted for longevity. The inhabitants of Central bly the great range between Norway and age, and have been so from time immemorial, according to Gothic history. The expedition next reached the "People of Dreams." Many of the Lap-landers have from the earliest times been vision seers. Some singular instances are related by travellers there in the sixteenth cen tury. The Cimmerians lived beyond the dreamers, and the approach to the infernal regions was near at hand. The polar ice, snow and darkness were naturally supposed to be pretty near the point where extremes meet. Turning away from this awful country, the Argonauts, with favoring winds, the ocean of the west, passing lerne (Mibernia), on their way to the Pillars of Hercules (the Straits of Gibraltar). The strange darkness of the far North was believed to be caused somehow by the peculiar shadows of great mountains. The darkness of the Arctic night, hovering over the North, led the voyagers of ancient times to believe that all the farthest parts of the ocean were shrouded in gloom; hence the old notion that the Atlantic at the west of the Pillars of ules was far away a sea of darkness. Even into the latter part of the Middle Ages this idea of the western Ses of Darkness prevaited among geog-graphers and navigators, Herodotus, called the Father of History," hearing at least four hundred and forty-ave years before the Christian era of the long nights at the Pole, could not believe that the people there could sleep for six months.

Pytheas, a distinguished Greek navigator, who fived at Marseilles, in France, when it was the seat of a flourishing Greek colony, about 300 B. C., was perhaps the earliest known navigator of the North seas whose voyage is now generally accepted as mainly genuine. Pytheas sailed to Al-fionn (Albion, the White Land, from its chalk cliffs), and six days' sail beyond the farthest part thereof he reached Thule, in the Northern Ses. There he found fogs and wild coasts, and saw that the light of day did not altogether disappear for twenty-four hours. This Thule was Iceland, at the most northerly part of which the summer nights are very light. The most northerly point of the island is usually laid down within the Arctic Circle. Some distance beyond Thule Pytheas found himself unable to procoed on account of a peculiar condition of the sea. was neither air, sea nor earth, but seemed a mixture of all three. The substance had a viscid appearance,

and his ship could not penetrate it. These statements of Pythese about the sea threw discredit upon his voyage for ages. "How palpably absurd," said the critics, "is the story of a mixture of earth, sea and air that stops ships in the midst of the ocean!"
Pythess was puzzled, no doubt, for he had never
seen ice before, and had no name for it or knowledge of its nature. But it appears incredible that distinguished men who have written learned treatises upon geography and voyages have been so blinded by prejudice as not to recollect that ice existed in the Arctic seas in the days of Pytheas as in the nineteenth century. As specimens of the theories of learned men regarding the marvellous obstructions met by Pytheas in the sea beyond Iceland the fol-

met by Pyticas in the sea beyond iceland the fol-lowing are quoted from works published in England and America in 1833:—

The calmness and sluggish heaviness of the North-orn seas, which the ship's prow could hardly cleave, were remarked by Pytheas. * * Perhaps the strength and complexity of our tides, which oppose serious difficulties to navigation along an indented coast, may have lent some countenance to prejudices founded in fable.

The supposition that the tides were the obstruction met by Pytheas in his navigation beyond Thule sooms singularly absurd when it is remembered that Pytheas was the first man known who understood the tides so well as to aschribe their cause to the inuence of the moon. His theory of tides is essentially that generally accepted at the present day. Another learned author supposed fog was the ranslucent, solid substance stopping the ship of

Pytheas. He wrote:-

The thick and gloomy mists with which the Northern Sea is often loaded might make a peculiar impression on one who had ventured into this unknown ocean so far beyond the limit of former navigation. They might make him prone to believe that he had arrived at the farthest boundaries of nature. Could greater nonseuse be uttered? How men who had so frequently read about the ice in the Northern Ocean, should forget, as they did, that in ancient times it sometimes rendered navigation dif-ficult and dangerous as it now does, is simply

astonishing. Geographers have disagreed as to the location of Thule. Disregarding the positive statement by Pytheas that he sailed six days (into the depth of the ocean, as some express it) some commentators have maintained that Thuis was Jutiand, where a region is called Tools.

Others have believed that part of called Thole-Mark or Tile-Mark, wa Tayle of Pytheas. Men have seemed ready lieve anything rather than the simple fact t great navigator saw Iceland. His descript learly and unequivocally points to Icelar

argument seems unnecessary. No one appears to question the fact that Garder, Flokko, Nadodd and others successively visited Iceland in later ages, before its sottlement by the Norsemen. But Pytheas could not reach Iceland because he was not a North-ARISTOTLE, PLINY, TACITUS.

Aristotle (born 884 B. C.) possessed a large fund of geographical knowledge. He knew of the existence of the Riphssan Mountains at the North, and had information of Ierne and Albion (Ireland and England) He was the first to call them, together, Britanicae Pliny (born A. D. 23) was acquainted with situation of the Hebrides, at the west from Scotland, as well as of Thule, and he was the first to mention Scandinavis by name. He considered it an island of great extent. Several mediaval maps lay down Scandinavia according to Pliny's limited view. In ancien times the Gothic or Scandinavian people considered their region a distinct part of the world, an island nse size. Some of the Norse sagas repre sent the great Scandinavian peninsula as the north ern half of the world. Norway was called by Pliny "Nerigon," and he asserted that the people sailed a far as Thule. If that was the case, and there is no reason to doubt the ability of the ancient Norse to reach Iceland quite as well in the first as in Ions or the Irish were not, perhaps, the first fishers or even forgotten colonists expedition sent by Agricola conquered the inhabi tants of the Orkneys and proceeded so far into the Northern Ocean as even to see Thule (Iceland), a place of snow and wintry aspect. This author states that beyone the land of the Sviones (Scandinavians) is a sea strangely languid and motioniess, and that the light of the night is far greater than the lustre of the stars. The noise of the sun's light, when that body was below the horizon, could be heard, and the gods could almost be seen as they moved about crowned with glorious light. Here we have a poetical account of the aurors borealis, of the peculiar rustling sound often heard during the most brilliant exhibitions of the phenomenon of "north ern lights," a suggestion of the remarkable brightness of the greater part of the Arctic night, and the remarkable calmness of the northern seas when sprinkled with floating ice.

olemy (born at Pelesium, in Egypt, A. D., 70) in his great geography mentions Scania (Scandinavia). After Prolemy, in the second century, prepared his geography little was reported in regard to the northern regions of the world for more than six hundred years. King Alfred of England, who reigned from 871 to 901, translated the geography of the Spanish monk Orosius into the Anglo-Saxon language. Oresius prepared his famous work in the nith century. Alfred added to his translation of Orosius the narrative of a Norwegian noble named Other, who had made a voyage for discovery and walrus hunting to the North Cape of Norway, and so along the coast eastward to the White Soa. Other was a man of wealth and enterprising spirit, and held the North Finns under tribute. His home in Norway was in the province of Halgoland, or Helgeland, on the shores of what the Northmen called (to distinguish it from the Baltic and the great Gulf of Bothnia, at the east of Sweden,) the Western Sea. Other's voyage extended past an uninhabited region at the mouth of Halgoland to a place then frequented by whale fishers, thence by the locality of the present town of Hammerfest and around the North Cape, which he doubled at the end of six days. From the region of the present Vardal ne came to a sea extending toward the south. Thither he continued his voyage until he reached the country of the Beormians or Bjarnians. In the White Sea Other and his crew of fishermen captured about sixty horse whales, now called walrus. By the trustworthy relation of Other it appears that the whale fishery was prosecuted along the coast of Nor-

KING ALFONSO AND BULL FIGHTING.

The approaching marriage of King Alfonso of Spain with the Archduchess Christine of Austria has been availed of by the societies for the prevention of cruelty to animals in Europe to endeavor to procure the exclusion of bull fighting from the programme of the marriage festivities. The society in Paris having addressed itself to President Bergh on the subject he has forwarded the following letter to the sister society of Cadiz, Spain:-

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AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS, NEW YORK, NOV. 14, 1879.

TO THE PRESIDENT OF THE SOCIETY FOR THE PROTECTION OF ANIMALS AND PLANES, CADIZ:—

SIR—The moment is well chosen and propitious for advancing the interests of humanity and civilization, by an appeal to His Majesty the King of Spain to put an end to the only remaining vestige of a barbarous period of human history, which has for its incentive and toleration the sufferings and doath of helpless and unofmiding animals to afford amusement to a brave land intelligent people. No act of His Majesty could better filustrate the benign and patriotic spirit which should animate the sovereign of a great nation than an effort to extinguish in the hearts of his subjects the instincts of crucity by the substitution of the blened principles of mercy and benevolence. It would not be difficult to prove that the political, moral and material well-being of the Spanish people are subverted and abused by the practice of builtighting, a spectacic which the sense of the ninoteenth century condemns. The undersigned, founder of the first society in America for the protection of dumb animals from crucity, respectfully asks permission to unite the plea of the parent society of this country along with his own for the suppression of a (so called) "sport" so opposed to the sentiments of true religion and national policy, I have the honor, &c... HENRY BERGH.

JUDGE WESTBROOK'S DECISION.

The decision of Judge Westbrook in the case of Denis Coppers has not yet been officially commuthe officers of Calvary Cemetery. If upon speed the judgment against the cemetery au-thorities should be sustained, then it is likely that the executor of Mrs. Emma Chovey, who was re-fused burial in a plot, will take legal proceedings in the matter.

MILLIONS AND MILLIONS.

Enormous Operations of the Mints and Assay Offices the Last Fiscal Year.

SIXTY-EIGHT MILLIONS COINED.

Large Amount of Bullion Taken from the Mines.

THE SILVER OUESTION UNSOLVED.

WASHINGTON, Nov. 15, 1879. The report of Mr. Horatio C. Burchard, Director of the Mint, was submitted to the Secretary of the Treasury this afternoon, showing the operations of the United States Mints and Assay Offices during the fiscal year which ended June 30, 1879. During the silver purchases, amounted to \$71,179,054 65, of which \$42,254,156 80 were gold and \$28,925,497 85 vere silver. Of the above amounts, \$38,549,705 89 of gold, and \$20,934,728 56 of silver were and \$10,607 79 of silver were United States coin; \$1,069,796 89 of gold, and \$1,072,919 29 of siland \$698,632 49 of silver were foreign coin, and late and other manufactured articles. The amounts of gold and siver separated in the refineries of the coinage mints and the Assay Office of New York were \$20,759,549 97 of gold and \$10,687,526 97 of silver, a

The coinage during the year amounted to \$68,312,592 50, and consisted of 2,759,421 pieces of gold, of the value of \$40,986,912, and 27,228,850 pieces of silver, of the value of \$27,227,882, and of minor coins 9,620,200 pieces, of the nominal value

The actual use of gold as a part of the circulation consequent upon the convertibility of United States notes into coin, it was anticipated would create a demand for the smaller denominations of gold coin, and during the last fis-cal year there has been a larger coinage of eagles, half eagles and quarter eagles than in any preceding year during a period of sixteen years.

The coinage of eagles and half eagles will be concoinage has been almost exclusively of standard silver dollars, of which \$27,227,500 were coined during the year, and the total coinage to November 1, 1879 has been \$45,206,200. There was no coinage of trade dollars or subsidiary coins, except the striking of specimen pieces or proof sets at the Philadelphia Mint. The total amount of subsidiary coin issued since the passage of the Resumption act has been \$49.974.931. The full amount coined was \$43.994.931. but \$1,020,000 in dimes was recoined into pieces of larger denomination at the Mint at San Fra

peac.

The gain arising under section 3,526 of the Revised Statutes on the coinage of silver during the fiscal year ended June 30, 1870, was \$3,287,486 09, from which \$17,499 48 was paid for wastage, \$93,474 32 for exponses of distribution, and of the remainder the sum of \$2,394,484 09 was paid into the Treasury. The profits on the minor coinage from July 1, 1875, to June 30, 1870, were \$31,292 57, from which there was paid the sum of \$1,290 of for transportation and \$775 for wastage.

Silver buildon has been purchased during the year at the comage mints and the Assay Office at New York for the coinage of standard silver dollars. Authority was given to the superintendents of the minits at Philadelphia, San Francisco, Carson City and New Orleans to purchase in lots of less than ton thousand ounces. During the year about one million standard ounces were thus purchased by them. Purchases in lots of ten thousand ounces and over are made by the director of the Mint, with the approval of the Secretary of the Treasury. Notwithstanding the fact that the Mint at Carson City is located but a short distance from the productive mines of the Counstock lovis, higher prices were demanded for company for the transportation of silver dollars iron carson was greater than from San Francisco. About the time that instructions were given discontinuing the coinage of silver dollars at Cerson a silgit domand arose at San Francisco for silver for export, which, with the falling off in the production, enabled buillion declars in many instances to dispose of their buillion at higher prices than that which the department regarded as the full market brice, hence the purchases at that point have for selver buillion at the San Francisco on the second production, enabled buillion declars in many instances to dispose of their buillion at higher prices

all demands for coin or fine bars in payment for deposits are promptly met. When the importance of this office is considered, situated as it is in the great mercantile and money centre of the country, it is to be regretted that better facilities are not at its command for the rapid prosecution of business."

The Director estimates the production of Colorado to be at the rate of at least \$15,000,000 gold and silver per annum, and the present facilities at the Denver Mint for operating upon this amount of bullion are considered totally inadequate.

INFLUENCE OF RESUMPTION.

Regarding the resumption of specie payments, he savs:—"Our experience in returning to specie payments without material reduction of the paper circulation seems to indicate that the depreciation of United States notes for the last eight years has not been due to their excess, but to their inconvertibility, and that resumption not only became possible but assured as soon as the accumulation of a sufficient coin reserve in the Treasury was determined upon and measures adopted for carrying that policy into effect."

Regret is expressed at the failure of the International Monetary Conference to adopt by international agreement a common ratio between gold and silver and establish the use of bi-metallic money. Although the delegates failed to secure any recommendation to the respective governments represented at the Conference for the use of gold and silver at a common relative value, their efforts are considered to have been the cause of practical and beneficial results.

PRODUCTION IN THE UNITED STATES.

The production of the precious metals in the

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PRODUCTION IN THE UNITED STATES.

The production of the precious metals in the United States in 1879 was considerably less than that of the preceding year. It has resulted from the diminished yield of the mines of the Constock lode. A depth has been reached of 1,000 feet below the bed of the Carson River, and impediments are encountered from accumulations of water and from the oppressive temperature, which discourage and have retarded vertical explorations. This has caused a falling off in the total yield of the States as officially reported, which in 1878 was \$47,076,883 of both gold and silver, but which for 1879 J.,F. Hollock, the State Comptroller, reports to be only \$19,305,473 97 from the production of the proceding year. Although the production of Nevada will be large and continuous for many years, it does not appear probable that the mines of that State will make such enormous contributions to the mineral wealth of the country as they have in previous years. This decrease has been in part compensated by the results of the more thorough exploration of the mining regions of the Rocky Mountains, especially in Central and Southern Colorado. The production of that State was at least \$6,000,000 greater in the last than in the preceding year, and will probably furnish an undiminished it not an increasing amount of silver in the future. After careful inquiry and consideration of the yield of different localities and mines in the United States the Director estimates the total production of the precious metals in the country for the facal year 1879 at \$79,712,000, of which \$33,000,000 was gold, and \$40,812,000 silver, as nearly as can be ascertained from official and other trustworthy sources.

Nearly all of the gold and a large portion of the silver produced in the United States the Director restimates the total production of the yield of

now averages \$7,000,000 of gold and \$5,000,000 of silver.

INCREARED COIN AND HIGH PRICES FOR GOODS.

The total amount of gold coin in the country on the 30th of June last is estimated at \$286,490,698 and of silver \$112,050,985, the gain in the past six years being \$151,490,698 gold and \$107,050,985 silver. Since the close of the last fiscal year and up to November 1 the imports of coin ant buillion and the domestic coinage have increased these amounts to \$305,750,497 gold and \$121,456,355 silver, a total of \$427,296,852, or about \$9 per capita of coin. It is estimated, should the flow or gold continue from foreign countries, the metallic circulation of the country at the end of the present itseal year will have swollen to over \$600,000,000. The report discusses at great length the monetary statistics of foreign countries, and states that the world's production of gold has declined in the past few years from \$131,000,000 in 1833 to \$86,000,000 in 1879. In referring to the course of prices it is held that comparisons indicate a rise in the value of money, measured in commodities, in Europe as well as this country, especially during the last year, and from the movement of the precious metals to this country at this time a turther decline in prices may be expected on the Continent and an advance in the United States.

In closing his report Mr. Burchard reviews the

\$42,074,001. The full amount coined was \$43,094,001.

In \$12,020,000 on dimes were recoined into pieces of larger denomination at the Mint at San Prancisco.

The bars manufactured—does and imported amounted to \$22,002,000 or with \$12,076,000 or were gold and minted treed—does not imported were gold and supplication of \$20,002,000 or with \$12,076,000 or were gold and supplication and supplication of the present color of the pr

money. Silver would become almost their exclusive circulation.

PLEA FOR BIMETALLIC CURRENCY.

The United States could not, single handed among commercial nations, with no European co-operation or allies, sustain the value of silver from the inevitable fall. If European nations continue to decline overtures for an international agreement in regard to the coinage of silver the expediency of opening our mints to the free coinage of their present stock of silver and inviting its speedy demonetization or export here is questionable. The true policy of this country is such conservative action as will tend to bring the values of gold and silver to their former relations, upholding the one and preventing the appreciation of the other until it can be determined whether commercial nations are willing that both metals should be yoked for equal monetary service. But in case the use of silver as money must be abandoned, it is gratifying to believe that the vast resources, the agricultural and mineral wealth, the present development of the mining and manufacturing interests and the facilities for inland commerce, the comparative lightness of taxation and relief from heavy fore gindebtediness, and, above all, the productive genina, industry, inventive skill and capacity of the people of the United States will enable them to retain, or as now, to draw from abroad the gold needed for the monetary use, and that the commercial disaster and depression threatened or feared as the result of restricting the commercial world to one metal are more likely to fall upon the mations that intriated and are responsible for the movement.

DROWNED IN HARLEM LAKE.

DROWNED IN HARLEM LAKE.

Policeman Edward Burns, of the Central Park Poice, discovered the body of a drowned man, at six o'clock yesterday morning, in the Harlem Lake, 110th street and Fifth avenue. The body was subsequently identified by Emil Eitel, proprietor of the Puck Hotel, 110th street and Fifth avenue, as that of Karl Bicker. Deceased was twenty-five years of age and was a native of Mergeutheim, Wurtemberg, Germany. He arrived in this city on board the steamship Nedesland the 3d of last September. On the following Saturday he called upon Mr. Eitel, whom he had known in the fatherland. He procured employment at his trade of upholsteror, but being of an indolent disposition he lost his job, and again returned to the Puck Hotel, where he remained until the 26th of October. On the evening of that day he said to Mr. Eitel that he, deceased, regretted he did not put an end to his life, as he had intended to do a year before. It appears that in the old country he had been an inmate of a lunatic asylum, and was, since his arrival in this city, subject to fits of despondency. Eitel says that deceased had no relatives in this country. A few weeks ago a prepossessing young lady called at Mr. Eitel's hotel and made very anxious inquiries concerning the whereabouts of deceased. A sweetheart? No; only an obliging country-woman from whom deceased had borrowed thirty marks, and who desired to have her money refunded. When Mr. Eitel hinted that Becker had committed smicide the young woman hurried away and has not since been heard from. The body will be interred in Potter's Field.

CHILDREN SCALDED WITH LEAD. sequently identified by Emil Eitel, proprietor of the

CHILDREN SCALDED WITH LEAD.

Little Walter Davidson, a boy of six years, on Friday evening played with some other children in front of James Walsh's plumbing shop at No. 3:5 front of James Walsh's plumbing shop at No. 355
Third avenue. Their pastime seemed to annoy the proprietor for he suddenly appeared at the window with a ladie rull of moiten lean which it is charged he threw at the little ones. The boy, Walter, received some of the burning metal on his face and cheeks and # part rell on his clothes where it cooled and hardened into tiny globules. When he came home his mother went to Walsh to remonstrate with him when, according to her statement, the man said he would do it again, that he would do it to her and would be prepared to give her husband a warm reception if she sent him. Mrs. Davidson had Walsh arrested and he was preduced before Justice Murray in the Jefferson Market Police Court yesterday.

"There are many fathers," said his Honor to the prisoner, "who would return your compliment of warm lead with a cold dose of the same metal. For my part I shall commit you for six months or require \$1,000 bail from you to keep the peace for that period."

A GLORIOUS COUNTRY.

Synopsis of the Princeton Scientific Exploration of Utah and Colorado.

THE WONDERS OF THE ROCKY MOUNTAINS

The Garden of the Gods---Magnificent Glaciations---The Home of the Treut-Extensive Forests and Flowers in Abundance

The joint report of William Libbey, Jr., and W. W. McDonald, of the Princeton scientific expedition to Utah and Colorado, is published, and embodies the results of their observations and work in the sometry. Accompanying the reports are three maps the first the result of a topographical reconnois sance in the valley of Smith's Fork, in the Uintah Mountains of Utah: the second giving the triangulation of the same; the third defining the relation between Fort Bridger and the valley of Smith's Fork. Colorado and Utah are considered topographically and hyposmetrically, while the meteorological report is confined to Utah, including record for part of the time spent there. THE FRONT BANGE OF THE ROCKY MOUNTAINS.

The reporters describe the front range of the pleasant sight after the long journey over the Plain the pleasure of which is mixed with surprise at the sudden change from plain to mountain, the cause of which has been a puzzle to many a traveller. The abrupt change from plain to mountain is not more sudden, however, than the change in the geological composition of the two systems under consideration The mountains rising along the border line pres in their rough and precipitous faces the strong, bold outlines produced by the metamorphic rocks, the granite, gneiss and the shists; while sedimentary rocks at their bases—the limesandstones-present a very different appearance Geologists say that this range was first elevated from the sea, and then that all these sedimentary rocks were deposited against their base. These sedientary rocks at their point of contact with the granites are not horizontal, but have been turned up on end by the force exerted by the granite mass, against which they were deposited, when it lifted them to their present positions. Their slope to the east from this point is not more than sixty degrees at any place. They form the basis of the great plain, and were once the bed of the sea which covered them, and which, on receding, left those thousands of feet of sediment to be carved out and carried off by the ice and water, which have left such wonderful traces of their power in this western country. The first feature of the low lands that strikes the eye is the low series of bills of a very even line of elevation, forming a sort of horizon or belt near the foot of the mountains, cut at intervals by

tion of which gast hies fifty miles to the north of Colorado Springs is the most picturesque, and will always retain its celebrity, on account of the striking forms of erosion just described.

Following this the report treats of South Park, an area of 1,200 square miles, with a general elevation of 8,000 icet, rising at times to 10,000 feet. It is surrounded by mountains, the bases of which bear marks of its having been the bed of a laze. The valley of the Arkansas, a hundred miles cut through the mountains to Poncho Pass, with a width of eight to ten miles, affords one of the finest fields for the study of glacial action in the Wost. At first the valley must have had a huge glacier running from north to south through its length, as there are still traces of such a glacier in the markings on the sides of the mountains and in the drift matter on its slopes. Then part of this valley formed the bed of a large lake, as is shown by the deposits in the bottoms where they are exposed. This lake occupied the lower half of the valley, and when it was drained off through the opening now traversed by the Arkansas River the heavy and coarse material at the upper end and the finer drift matter at the lower end were exposed. The valley has many rounded coloing hills, which are covered by debria and runge in height from fow to 701 ret. The masses of rock which have been immediately large moraines, and where exposed the glacier came of this glacier are remarkable for their magnificent. The masses of rock which have been imagnificent. The masses of rock which have been imagnificent of from 1,000 to 1,500 feet in depth. The terminal moraines of this glacier are remarkable for their size. Everywhere the traveller is hindered in his journey by mounds, ridges, basins and bowiders, the latter often from 20 to 50 feet in diameter. Worn rocks are also expessed, showing the effect of ice on their surfaces.

Toronharical recontants of Utah, especially those of the valley, which the scientists stunied with great and thus have expenses an

tesus between the streams is almost exclusively yellow mari, mingled with and overlaid in many places by broad lines of drift from the mountains. It is quite rich, and, under different climatic influences, fit to sustain vegetation. At present only sagebrish, greasewood and bunch grass grow upon it. The whole of the mountain slopes, from the edge of the terraced plateaus to an attitude of about eleventhousand foet, are covered with extensive forests of white and yellow pine, spruce, red cedar, hemlock and aspen. Nearly all of these woods were of young growth: thus giving evidence that extensive fires have raged here at intervais over a long period of time. A noticeable feature of this region is the scarcity of birds, reptiles and insects, with only a few snakes and lizards on these plateaus. Mosquitoes are very numerous in the months of June, July and August, after which they disappear. The deer-fly is a ferocious insect, very much like the common horse-fly, but larger and with iridescent colors, sometimes yellow, green and red being banded together on its head. They go in swarms, attacking both man and beast, and are a terrible scourge to animals.

The report further embraces many interesting and instructive data, meteorological and barometric, and concludes with a diary in detail, full of novel and romantic as well as statistical reports.

THE HERCULES AT WORK.

CRUISING OFF SANDY HOOK-THE STEAM PILOT RACING WITH THE SAILING PILOTS-HER PIRST JOR-INDIGNATION AT THE PILOT COM-MISSIONERS' OFFICE.

The steam pilot boat Hercules, after lying all night in the Horseshoe, went to sea in the morning. She was gayly dressed in honor of the occasion with a blue peter, bearing the device "No. 10" at the fore and the Stars and Stripes and a flag with her name at the peak and truck of the mainmast. A black "X" was riveted on each side of the white funnel, so that her number might be distinguished in two direc tions. She is fitted with two steam whistles, one for ordinary use and a second of great power, sound ing like a caliope, that can be used in foggy weather

or in any case of emergency.

At about five o'clock A. M. the watch sang out—

"Bow, a light on the port bow."
"Aye, aye," answered George Cisco, the pilot who had the first turn, tumbling into his clothes with

lightning rapidity.

Everybody turned out as no one wished seeing the first vessel boarded. It was still dark, but the vessel was presently made out to be one of the German steamers. The Hercules ran up under her stern and found that she had already secured a pilot from one of the off-shore boats. The early risers were soon consoled with a cup of coffee and in a couple of hours they sat down to breakfast with a good appetite. About eight o'clock P. M. "jang! jang!" went the beil, and the wheel was put hard a port, heading the Hercules toward the east, where a dim speck was visible on the horizon. Pilot boat No. 19 was off the port bow, but did not appear to have noticed the approaching steamer. After running about fifteen minutes the Hercules hoisted her number and presently made out the steamer to be the Germanic, of the White Star line. At first the pilots thought that the Germanic had secured a pilot, but in a few minutes the steamer sent up a jack to the fore and the Hercules lowered away her boat. As soon as George Cisco was seated in the stern the little yawl danced over the waves and in a few minutes the first pilot from a steam pilot boat had taken charge of the big steamer. As soon as the boat returned and was secured on the davits, the Hercules resumed her cruise and hunted up fresh vessels. She ran out to the southward and eastward for sbout six or soven miles and then came slowly back without making a prize. During the afternoon she had a short race with pilot boat No. 19, but after a short burst at full speed the little speck on the horizon proved to be a vessel bound to the southward. The pilots could not have had a better day on which to try the Hercules and find out what she was good for, as three was quite a heavy sea on all day. The Hercules behaved very well, rolling pretty badly, but still with a very easy motion. During the attennoon her canvas was brought out and rigged. She has a mainsail, mainstaysail and jib, that occasionally come in very handy as an auxiliary to steam. She arrived at Staten Island at twenty minutes past four P. M., and after transacting some buviness returned at once to the lightship, about which point she intends to the first pilot to board a vessel from the Hercules her stern and found that she had already secured a pilot from one of the off-shore boats.

The arrival of the Germanic under the charge of The arrival of the Germanic under the charge of the first pilot to board a vessel from the Hercules created quite an excitement down in South street, as it had been reported that the Pilot Commissioners were going to have him arrested on sight and locked up in Ludiow Street Jail. Inquiries at the office of the White Star Company elicited the information that they were quite in favor of the steam pilot boat and that they intended to have their captains take their pilots from her on every possible occasion. They did not appear to believe that the Pilot Commissioners had the power to prevent the use of a steam vessel in the business. The case will probably have to be decided in the courts. At the Pilot office nothing else was talked of, and the pilots look to the Commissioners for the immediate punishment of the offenders. It is understood that George Cisco is to be tried at once for the violation of the following provisions of law:—

First, no ship shall be bearded from a steam vessel white a pilot boat is in sight; second, no vessel propelled by steam shall be a pilot boat without the causent of the Commissioners: third, no boat not now in the service shall be placed in service but by consent of the Commissioners.

They also say that any vessel refusing the services.

LAUNCH OF THE COLUMBIA.

at ten o'clock from the shippard foot of Bridge street. Brooklyn. She was built for Captain Van Pelt to supply the place of the Issac Webb, pilot boat No. 8, which was lost some time ago on the Long Island coast. The dimensions of the new vessel are Island coast. The dimensions of the new vessel are as follows:—Keel, 75 feet; beam, 21 feet; hold, 8 feet; water line, 82 feet; over all, 87 feet; tonnage, 90, secording to Custom House measurement, and 160 tons burden. She is rigged in the usual fore and aft style peculiar to pilot boats, the following being the dimensions of her standing rigging:—Length of foremast, 75 feet; pardners, 18; inches; mainmast, 74 feet 6 inches; pardners, 18 inches; fore and maintop masts, 25 feet; cap, 7 inches; mainboom, 37 feet 6 inches; bowed, 17 feet 6 inches outboard; slings, 12 inches; foreboom, 25 feet; size, 8 inches; bowsprit, 12 feet 6 inches inboard and 21 feet outboard; bed, 15 inches by 17 inches; foregaff, 21 feet; size, 6 inches; maingaff, 26 feet; size, 6 inches.

PAUPER IMMIGRATION

The Commissioners of Emigration called the attention of Secretary Evarts a few days ago to the alarm ing increase of paupers, lunatics and cripples sent to this port from foreign countries. The letter, which is signed by George J. Forrest, president of the Board, was accompanied by the affidavit of Theodore Meier, a deformed pauper, "who, Theodore Meier, a deformed pauper, "who, having become a public charge, was sent to the United States at the expense of the authorities of Barschweril, Switzerland." Mr. Evarts is requested to take action in regard to the case. The Commissioners also complish to the Secretary of the importation of persons unfit to support themselves by industry, and of the prevalence of padronism, citing several recent cases. The communication concludes in the following terms:—

Concludes in the following terms:—
The law as now in force does not give power to compot the return of any panper, lunatic or criminal that may be brought to this country, and the Commissioners respectfully invite your attention to section 3 of the proposed law contained in their last report, a copy of which is sunt herewith, and which, if enacted, would meet this difficulty. The bill, although presented at the last seasion of Congress, did not become a law; but it is the intention of the Commissioners to again present it when Congress reascenbles, and they respectfully request your valuable coperation in the matter.

**Regentary Evarts preparetty mention for the constant of the content of the content

Secretary Evarts promptly replied to the above ommunication as follows:-

communication as follows:

Department of State, Warnington, Nov. 14, 1879.
Grouds J. Fornest, Eag., President of the Commissioners of Emigration, New York city:

Sin-I have received your letter of yesterday, with its accompaniments, relative to the recent landing at Now York of one Theodore Meier, a deformed pauper from Switzerland, and to the practice of landing deformed dults and hebbless children from foreign countries like to become a charge to your city or State.

I concert in your opinion as to the character of this attempted abuse of hospitality, which should be checked by proper legislation. To that end it will give me pleasure to contribute in any way which may be in my power.

I am, sir, your obedient servant,

WILLIAM M. EVARTS.

"LITTLE SISTERS OF THE POOR."

A hearing before Referee Edward F. Underhill, in a collateral matter appertaining to the Marx will con-test, took place at the office of Elbridge T. Gerry, No. 261 Broadway, yesterday. The object of the reference is to ascertain the proofs and report them to the Surrogate, as to whether the Home for the Aged of the Little Sisters of the Poor, in this city, is the corporation intended to be described in the will of the late Mary Caroline Marx as the "Roman Catholic Little Sisters of the Poor," Arthur J. Deianey, counsel for that corporation, presented himself as a witness and testified that he had drawn up the articles of incorporation of the Home for the Aged of the Little Sisters of the Poor, and that such society was then the second of that Order in the United States. He also testified that the incorporators, whose names are Louis A. Gomien, Mrs. Susan A. Coutant and her daughter, Miss Coutant; Miss Margaret Ann Lynch, and Charles Mousette, represented to him at the time they were citizens of this country. Mr. Delancy put in evidence a certified copy of the certificate of incorporation, dated August 18, 1871. The witness further testified that he understood there are now about twenty of these societies in this country and that the Order was founded in Brittany about forty years ago by Mother Augustine. A further hearing before the referee was set down tor the fortenoon of Friday, the Est inst., at the same place. No. 261 Broadway, yesterday. The object of the re